

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTION OF A NEW GENUS AND SPECIES OF
APHIDAE

By F. C. HOTTES

The species described herewith has been in my collection more than a quarter of a century. Through the years I have been awaiting the collection of alate viviparous specimens so that the generic status of the species could be definitely established. I have looked for it, without success, in Illinois where its host plant is common, for the past two years. Fellow entomologists have looked for it on the farm near Ames, Iowa where it was first taken, without finding it. Immature forms necessary for the placement in a genus following the system of Börner are not available. Rather than describe this new species in a known American genus and thus cover up its peculiar characters, a new genus is described for it.

Iowana New Genus Hottes

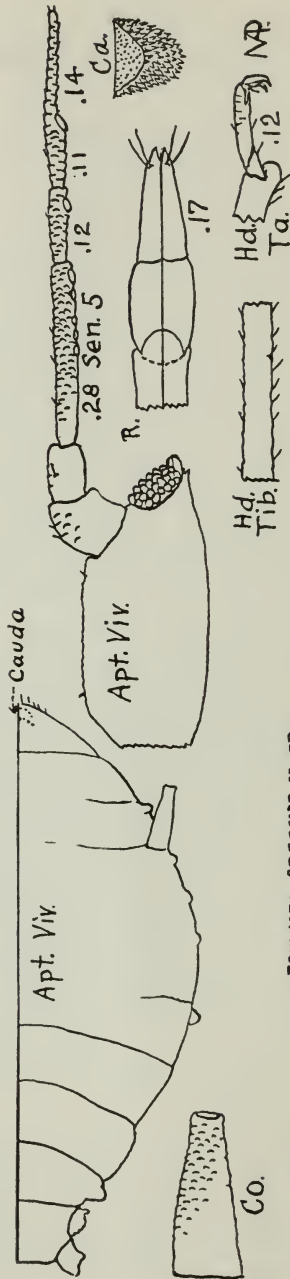
Head with frontal margin very broad and flat. Antennae five segmented. Prothorax with very large and broadly rounded lateral tubercles. Abdominal segments anterior to cornicles with large lateral tubercles. Abdominal segment posterior to cornicles with very large broadly rounded lateral tubercles. Cornicles almost truncate suggestive of the cornicles of *Macrosiphoniella* but not reticulated, without rim at apex, and about twice as long as width at base. Cauda broadly rounded slightly shorter than width at base, not constricted, suggestive of *Anuraphis*. Cauda not extending to end of abdomen. Anal plate but little differentiated from rest of abdomen, indicated only by better developed setulose surface provided with a few normal hair. Body hair very sparse, fine and short. This genus differs from *Cerosipha* Del Guericco in the shape and length of the cornicles, cauda, and little differentiated anal plate. From *Brachyunguis* Das, this genus differs in length of unguis, number of lateral tubercles, longer cornicles and much shorter cauda.

Genotype *Iowana frisoni* n. sp.

Iowana frisoni n. sp.

Apterous viviparous female.

Length from vertex to apex of abdomen 2.14 mm. Width of head through the eyes .34 mm. Color not known, most likely light green, uniform throughout, except for some brown on antennae and brown cornicles. Length of antennal segments as follows: III .27 mm., IV .114 mm., V .1 + .143 mm. First antennal segment very heavy with broad base. Antennal segments imbricated, the imbrications being heavy



IOWANIA FRISONI N.SP.

PLATE VIII

and well developed beyond the middle of the third segment. Third segment with five small secondary sensoria, arranged in a straight row and close together on apical half of segment. Primary sensoria present on segments three and four, primary sensorium on fifth segment without marginal sensoria. Hair on antennae almost absent, when present not much more than two times height of imbrications and very fine. Anterior margin of head very broad and flat, almost free from hair. Eyes small extending but little beyond side of body, rather flat, ocular tubercles present but small. Rostrum with fourth segment extending beyond coxae of metathoracic legs, apparently almost free from hair, last three segments of the following lengths: .128, .157, .014 mm. Lateral tubercles on prothorax very large, with broad base, broadly rounded. All tibiae short, length of hind tibiae .46 mm. All tibiae with very few hair, hair on outer margin almost absent, hair present, exceedingly short and fine. Hair on inner margin of hind tibiae less than .014 mm. in length, or about one third width of tibiae. First tarsal segment about .028 mm. in length, almost triangular in shape with two hairs in inner surface, this segment is inserted rather deeply within end of tibiae, so that the heel of the tibiae extends well beyond mid region. Second segment of tarsis .10 mm. in length. Surface of abdomen with very fine setulae except for region near apex where the setulae are very well developed. This region has a few fine hair of normal length, hair on rest of abdomen almost absent, where present very fine and extremely short. Cornicles .228 mm. in length, not much more than two times width at base, without rim at apex, surface of cornicles strongly imbricated. Cauda broadly rounded .10 mm. in length, not constricted failing to reach end of abdomen. Body apparently very flat. It is not known that the five segmented condition of the antennae is common to all generations.

The characters listed for the genus distinguish this species from other American forms.

Described from two apterous viviparous females taken on *Silphium laciniatum* (Rosin Weed, Compass Plant) in region of axial of leaf. Ames, Iowa, Aug. 25, 1925, G. Hendrickson Collector. Holotype deposited in collection of the United States National Museum.